

Health Matters

Super Early Bird
registrations
open in November

Connect 2019



HEAD HEALTH



WOMEN'S HEALTH



SKIN



BONES AND
SOFT TISSUE



SKIN



BONES AND
SOFT TISSUE

**29-30
March 2019**

Programme summary
enclosed

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 **BOWEN**
HOSPITAL

 **ROYSTON**
HOSPITAL

 **WAKEFIELD**
HOSPITAL

Treatment of Urinary Tract Stones

Mr Grant Russell &
Mr Rodney Studd
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Radiation Oncology

Darien
Montgomerie
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Integrated Care


Proactive
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Message from Acurity Health

 Acurity Health

 Chief Executive Officer, Dr Jonathan Coleman

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The pace of change in modern society feels like its permanently accelerating and evolution is a constant. Healthcare is no exception, and the way we deliver care will be fundamentally altered by technology in the same way that other industry models have been disrupted (think Uber and Airbnb).

Of course, technological change is so rapid that it's hard for us as individuals to keep up with the latest developments. As many of us are all too aware, if you want to get the best out of your computer or smartphone, find a teenager to tell you how to use it properly. It's easy to become both weary and wary of change, but for any entity to remain competitive and relevant, it's important to not only embrace it, but to try to anticipate where it's going to next.

Healthcare is a sector where technology is making a major impact, and investment in technology is the key to better productivity and greater safety for patients. In short, a lot of repetition can be avoided in our hospitals by greater digitalisation, freeing up clinical staff to focus on patients rather than paperwork. At the same time the patient experience can be made smoother and safer through digitalisation – telling your story once rather than to many different people, and having the details (eg medications and allergies) recorded accurately and legibly.

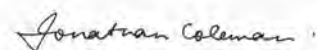
That's why at Acurity we're putting a real emphasis on digitalising systems and removing as much paper as possible.

We are continually looking for ways to improve the experience for your patients at our facilities.

“...keeping pace with technology is key to keeping right at the front of the private healthcare field, and that is where Acurity is determined to remain.”

We've completed e-discharges and are now moving on to e-admissions; at the same time it's really important to be able to easily gather information about how our hospitals work, as well as being able to make our processes as efficient as possible.

There's one thing for certain, keeping pace with technology is key to keeping right at the front of the private healthcare field, and that is where Acurity is determined to remain.



Jonathan Coleman
Chief Executive Officer
Acurity Health Group Ltd

Improving our Processes

PRE-ASSESSMENT REVIEWS/CLINICS

- Electronic forms enable quick identification of patients who require a pre-assessment call or clinic appointment
- Simpler, smoother, safer process

ONLINE ADMISSION FORMS

Removes the repetitive nature of information collection whilst improving Acurity's access to admission information earlier

CLINICAL CARE

Enhanced patient care using the ISBAR communication tool for structured and standardised communication between clinical staff

HOURLY PATIENT SAFETY CHECK

DISCHARGE PROCESS

Electronic Discharge for clear, secure improved summaries and co-ordinated handover of care

NATIONAL EARLY WARNING SCORE SYSTEM

To aid earlier detection of patients developing critical illness

CEMPICITY

Patient experience survey

Treatment of Urinary Tract Stones

Mr Grant Russell & Mr Rodney Studd



Wakefield Hospital

Urology

Mr Grant Russell (04) 473 6207 and
Mr Rodney Studd (04) 920 0162, Urologists

www.wakefield.co.nz

Renal colic is in many centres the most common cause for urgent admission to Urology services. Acute obstruction of the kidney by stone not only results in severe pain, but may also cause fulminating infection and impairment of renal function. A recent study published by Auckland colleagues noted the incidence of acute admission for renal colic in the general population to be 85 cases per 100,000 people.

The last three decades have seen the almost complete disappearance of open surgery for urinary tract stone, and a concomitant advancement in minimally invasive endourological and extracorporeal technologies. The once routine standard flank incision for kidney stone access is associated with significant post-op pain and morbidity: A heavy manual worker undergoing open stone surgery could expect to be absent from work for six to eight weeks following the procedure.

Percutaneous stone removal: Percutaneous Nephrolithotomy (PCNL)

Larger renal stones (>2cm) and complex 'stag horn' calculi are best managed with percutaneous removal. After placing a ureteric catheter via a cystoscope for the injection of contrast to outline the renal collecting system, a fine needle punctures a suitable location in the kidney, guide wires are placed through the puncture site, and using various dilatation techniques, eventually a tube access to the kidney collecting system is achieved via a 1cm incision (figures 1a) and 1b).

A scope visualises the stone and various energy sources including laser, ultrasound and pneumatic can be used to fragment the stone and allow the extraction of the stone fragments through the access sheath.

Some Urologists work in with Interventional Radiology Colleagues with PCNL. Dr Billy Cheung, Interventional Radiologists has supported Wellington Urologists with renal access over many years. More recently has seen the emergence of the 'mini perc' where a very fine access sheath is placed into the kidney and smaller scopes and laser are used to remove stones.

Generally there is a hospital stay of one to two days following percutaneous stone removal and there is usually a rapid return to full activity. The major risks include bleeding (which can be minimized with the use of balloon dilatation access), infection, and rarely, inadvertent perforation of adjacent structures.

Lasertripsy

Two important technological advances in the management of urinary stone disease have been the double-J stent and the ureteroscope. The former can be easily placed in the acute stone patient to overcome obstruction and manage pain and infection. Again via cystoscope, the



upper urinary tract is visualised with radiological contrast and a fine guide-wire passed up the ureter into the kidney. Over the guide-wire is placed the straightened stent. Once the guide-wire is removed memory coils at either end deploy, self-retaining the ends of the stent in the kidney and the bladder.

Until the early 1980's, the Urologist's endoscopic armamentarium was restricted to solid rod lens instruments. These large, fragile and non-bendable scopes were not particularly helpful in accessing the ureter. An improvement came with the so called 'semi-rigid' ureteroscopes: finer scopes made of fibre-optic bundles within a bendable metal case that often provided sufficient flexibility to access the kidney via the bladder. Because of the rigid metal casing, the view is restricted to straight ahead, and although ureteric calculi can be fragmented, stones located in kidney calyces cannot be treated with these scopes and the semi-rigid ureteroscope has found its niche in the management of stones in the lower third of the ureter.

Figure 1a
Needle access
of kidney lower
pole calyx



Figure 1b
Sheath placed after
tract dilatation with
safety wires to the
bladder, ready for
nephroscope and
lasering of stone





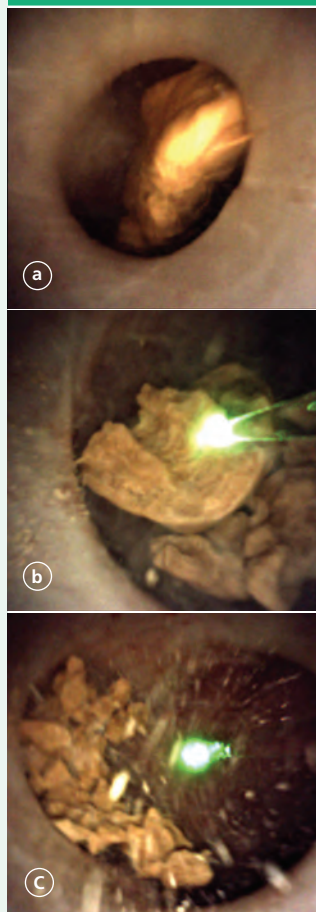
Figure ② Disposable flexible ureteroscope

Ureteroscopy and the treatment of ureteric stones have been revolutionised by the development of the flexible ureteroscope and the stone laser. Initially the flexible scopes were much like a miniaturised colonoscope: fibre-optic bundles encased in a 'steerable' polymer where the operator can visualise the pelvicalyceal system and focus on any stone within the renal pelvis or calyces. Not unexpectedly, the fibre-optic ureteroscope has a limited life span due to the fineness of the instrument and the flexing that fibres are put through in negotiating the kidney calyces. Inadvertent use of the laser too close to the tip of the instrument can result in destruction of the scope: they remain expensive and delicate. The last two years has seen the emergence of the disposable flexible ureteroscope: instead of the conventional fibre-optic bundle, an electronic lens provides excellent vision in a lightweight package that is very easy to use and economically superior (figure ②).

The authors were amused to hear of an ENT colleague who recently picked up a disposable ureteroscope for the first time and successfully removed a foreign body from a bronchus!

Having a clever instrument to access the pelvicalyceal system of the kidney is one thing, but once the stone is located it needs to be removed. Along with the improvement in endoscopes outlined above, there has been a simultaneous improvement in laser technology allowing fine laser fibers to be passed along the scope and to destroy the stone.

Figure ③ Progressive destruction of kidney stone by laser



Wakefield Hospital has very recently acquired a holmium-YAG laser that has proven very effective in treating urinary tract stones. Laser fibers of various sizes (200-1000 μ m) can be used via the flexible ureteroscope as well as the nephroscope as in PCNL and through a cystoscope for bladder stones.

The new holmium laser provides two principal modes for stone destruction: fragmentation and 'dusting,' where changing the frequency and power settings of the machine facilitates the variation in treatment. The latter renders the stone down to sand-like particles that are readily washed out of the urinary tract (figure ③).

Figure ④a Flexible disposable ureteroscope with guide wire in upper pole calyx

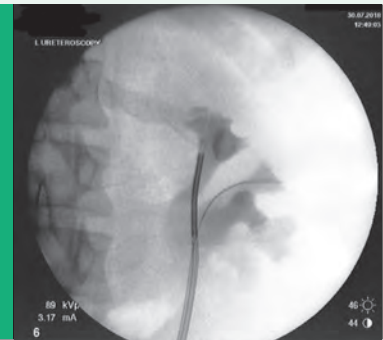


Figure ④b Scope in lower pole calyx



To facilitate ureteric and kidney stone removal often a wide-bore catheter (an access sheath) is passed up the ureter to the kidney at the commencement of the procedure, and this allows the scope to be rapidly passed into the kidney, as well as the removal of stone fragments that may be extracted with a fine basket (figure ④a and ④b).

Stones in the kidney and ureter up to 2cm in size can be lasered successfully. Ureteroscopy and lasering of urinary calculi is often completed on a day-stay basis: a stent may be left in after the procedure for a week or two.

Extracorporeal Shock Wave Lithotripsy (ESWL)

Wellington has been on the mobile lithotripter 'circuit' since its inception in 1995.

Patients are anaesthetised on the bus, treated and then returned to recover in the hospital. The technology has recently been upgraded with a more effective electro-magnetic lithotripter installed.

Stones <1.5cm can be effectively fragmented, and both x-ray and ultrasound imaging are utilized to localise the stone and monitor progress of stone destruction.

The mobile lithotripter has recently relocated to Wakefield Hospital with the first patient undergoing treatment at the end of August 2018.

Figure ⑤ Lithotripsy bus at Wakefield Hospital



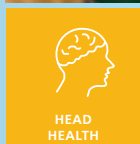
Connect 2019



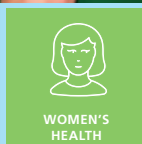
Topics are all directly applicable to the better diagnosis and care of your patients.

**29-30
March 2019**

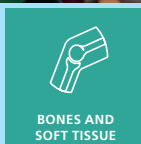
Programme
preview enclosed



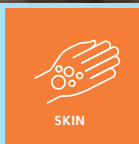
HEAD
HEALTH



WOMEN'S
HEALTH



BONES AND
SOFT TISSUE



SKIN



Acurity Health Group is proud to be the organisers of Connect 2019, an Acurity GP Conference that is to be held at Te Papa on 29th and 30th March 2019. As the leading GP Conference for the lower North Island, we celebrate our upcoming 21st conference with Wakefield, Bowen and Royston Hospitals in association with the Department of Primary Health Care and General Practice at the University of Otago, Wellington.

Over two days our programme will focus on the main strands of Head Health, Women's Health, Bones and Soft Tissue, and Skin.

Delivered by a multidisciplinary group of healthcare experts, all topics are tailored for the daily practice in primary healthcare and will focus on the relevant health topics and latest developments in medicine,

making Connect 2019 the must-attend Conference for healthcare professionals.

Super Early Bird registrations will open in November to all general practitioners, registrars, registered nurses, and practice managers.

We look forward to welcoming you to Connect 2019.

If you have any questions please contact Sarah Malone on (04) 920 0158, or email sarah.malone@acurity.co.nz

**Register before
31 December
2018 to save
up to \$150
with the Super
Early Bird**



HEAD HEALTH

29 MARCH, FRIDAY MORNING

Key updates and topics explored include:

- Primary Care Mental Health – from here to where?
- Medico Legal – Capacity Assessment
- Strokes
- Youth Well Being Study – outcomes and how we can help
- Brain Tumours
- Seizures
- Oral Health including Tongue



BONES & SOFT TISSUE

30 MARCH, SATURDAY MORNING

Some of the areas explored will be:

- Rheumatology
- Severs Disease
- Labral Tears
- Paediatrics (practical session)
- Bone Health and the Older Adult – what's new
- 3d Imaging: Joint Replacement



WOMEN'S HEALTH

29 MARCH, FRIDAY AFTERNOON

Relevant topics include:

- Pelvic Pain
- HRT for Women
- Breast Cancer – Updates
- Porphyrias
- Murmurs: What to look out for in Children
- Hypertension in Pregnancy



SKIN

30 MARCH, SATURDAY AFTERNOON

Multiple updates will include:

- Ulcers
- Eczema / Psoriasis / Acne / Nails / Vitiligo
- Mechanistic Melanoma Trial and Cancer Vaccine Programmes
- Allergies
- Scar Management
- Treatment of Vascular Birthmarks and Common Vascular Abnormalities

Registration fees

		Super Early Bird (closes 31 Dec)	Early Bird (closes 15 Feb)	Standard
Doctor	Full	\$400	\$480	\$550
	Day		\$300	\$350
Nurse	Full	\$175	\$200	\$250
	Day		\$180	\$200
Other Health Professional	Full	\$175	\$200	\$250
	Day		\$180	\$200
GP Registrar and students	Full	\$175	\$200	\$250
	Day		\$180	\$200

Ways to register

(Registrations open November)

Online: www.acurity.co.nz/connect

Email: connect@acurity.co.nz
(we will contact you)

Questions: Call Sarah Malone on
(04) 920 0158

12.25 CME credits

This conference has been endorsed by The Royal New Zealand College of General Practitioners (RNZCGP) and has been approved for up to 12.25 CME for the General Practice Educational Programme (GPEP) and Maintenance of Professional Standards (MOPS) purposes.

Radiation Oncology

Darien Montgomerie



📍 Bowen Hospital

🏥 Medical Oncology

👤 Darien Montgomerie, Site Manager,
Bowen Icon Cancer Centre

☎ (04) 896 0200

🌐 www.bowen.co.nz

Bowen Icon Cancer Centre will be adding radiation therapy to its facilities from late 2018/early 2019, complementing the existing medical oncology and haematology services.

Approximately half of New Zealanders diagnosed with cancer each year could benefit from radiation therapy¹. It also has a very important place in helping patients with cancer that cannot be cured. In patients with advanced cancer, radiation therapy is commonly used to shrink tumours, and/or treat cancers that have spread. This provides relief from pain and other symptoms, which is vital for improving a cancer patient's quality of life.

The technology used in radiation therapy is constantly improving. Recent advances have benefited many patients with cancer, resulting in higher cure rates, fewer side effects, shorter treatments and improved quality of life¹. The latest imaging technology provides three-dimensional images of tumours that precisely target radiation beams to the cancer, limiting damage to important adjacent organs. Real-time imaging is in development which will enable treatment teams to compensate for tiny involuntary patient movements, such as breathing².

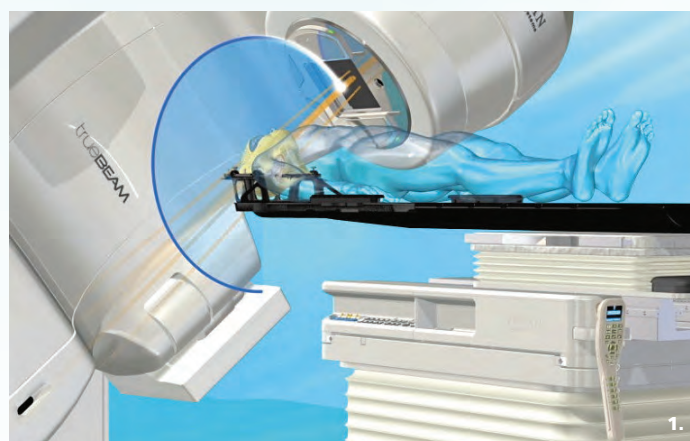
A range of the latest treatment techniques will be available for selected patients requiring radiation therapy at Bowen; including stereotactic radiation therapy. This type of radiation therapy is an advanced, highly effective treatment for malignant or benign small-to-medium size tumours in the body.

Sites which are commonly treated or are under investigation are:

- lung
- abdomen
- prostate
- liver
- spine
- head & neck.

Stereotactic radiation therapy is intended to improve a patient's quality of life and decrease treatment related complications, by minimising radiation dose to surrounding normal tissues. It also results in less time on the treatment bed for patients. By using precise three-dimensional imaging, sophisticated immobilization equipment and state of the art treatment technology, stereotactic radiation allows for larger amounts of radiation to enter the body across a shorter period of time. Treatment is generally delivered as a single treatment or a few short treatments, as opposed to conventional treatment which delivers smaller doses over a number of weeks.

Stereotactic radiosurgery (SRS) involves the delivery of a high dose of focused radiation to a small, well-defined area/s in the brain or other part of the head. Although surgery is in the name, this is a non-surgical and non-invasive procedure, patients are well immobilised in a mask to limit movement whilst still ensuring comfort. SRS may be used to treat patients with secondary cancers that have metastasised to the brain, slow growing benign tumours



(such as acoustic neuromas), and sometimes to re-treat an area has previously had radiation therapy before (head and neck cancers or primary brain cancers). Depending on the type of SRS and number of areas to be treated, set-up and treatment generally takes between 30 minutes to one hour.

The delivery of SRS is not painful and is usually well tolerated by patients. The potential side-effects vary depending on the area being treated; however, some may get side-effects following treatment including tiredness, mild nausea or headache.

References

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 2. Radiation Oncology Targeting Centre. (2017). Retrieved from www.targetingcancer.co.nz
- * Image 1 credit: Varian Medical Systems
* Radiation Logo credit: Targeting Cancer

Bowen Icon Cancer Centre will be offering SRS services using the latest Varian TrueBeam Linear Accelerator Technology equipped with Hyper-Arc delivering streamlined workflows, improved accuracy and enhanced patient safety. For further information or referrals contact referrals.bowen@oncnz.team or ph (04) 896 0200



Falls Update



Dr Andrew Linton

At least one third of New Zealanders aged over 65 years fall and injure themselves each year¹. An estimated 30% of these falls are potentially unreported.



1/3 of Kiwis aged over 65 years fall and injure themselves each year¹

Five to ten percent of these falls result in a major injury, such as a head injury or fracture². One in three falls also result in a patient developing a fear of falling. This can lead to reduced mobility, skeletal muscle mass loss, difficulty toileting, and social isolation³.

Falls can be an indication of a patients underlying frailty and each fall can result in frailty progression. A multifactorial assessment and management plan can reduce the recurrence of falls and prevent complications such as fractures. This can involve primary care, secondary care and community allied health assessment.



Falls Assessment	
Medication	Medication can contribute to the increase of falls. Loop diuretics, antipsychotics, opioids and benzodiazepines are the drugs most associated with falls ⁴ . Other antihypertensive medication and non-selective beta-blockers are less associated with falls, but in the first 24 hours after escalating BP medication there is an increased falls risk ⁵
Postural blood pressures	Postural blood pressures should be considered after a fall. In the older person, individual targets accepting a higher systolic BP are often required
Joint deformity & footwear	Joint deformity and appropriate footwear – may need podiatry input or orthotic devices
Pain relief	Ensure adequate pain relief
Peripheral neuropathy	Assess for peripheral neuropathy – can be associated with diabetes mellitus and low B12 levels
Impaired mobility, gait and muscle wasting	Impaired mobility, gait and muscle wasting – can be identified by difficult rising from a chair, parkinsonian features, and an impaired “get up and go test.” Strength and balance training programmes can help prevent falls ⁶
Visual acuity	Visual acuity – annual assessment for falls patient
Cognitive impairment	A cognitive screen should be performed. Cognitive impairment is a significant risk factor for falls.

Frail patients who are reviewed by a geriatrician are 12 times more likely to be alive and living independently at 6 months, than those that aren't.

Other points to consider

ECG	ECG should be performed – if significant cardiac history and sudden collapse
Nutrition	Malnourishment is a risk factor for falls and may need dietician input
Home hazards	Home hazards can be assessed by an OT
Continence aids	Continence aids such as a bedside urinal or commode or altering diuretic treatment reduce the need to rush to the toilet
Anticoagulation	Falling is not a contra-indication. This is an individualised risk/benefit decision
High falls risk patients	The risk can be partly mitigated using mat based sensors, personal alarms, or a speed dial on a personal mobile ^{7,8} .

Geriatrician review

Referral criteria to a geriatrician:	One or more falls per year
	Fall with injury
	Balance and gait issues
	Multiple co-morbidities
	Osteoporosis management
	Polypharmacy.

Assessment for osteoporosis and fracture prevention

Osteoporosis is a silent disease until a fracture occurs. Fragility fractures occur after minimal trauma to the radial head, proximal humerus, vertebrae, or femoral neck, and are indicative of underlying osteoporosis. A fractured neck or femur has a mortality of 30% at one year, and 50% of patients will have had a previous fragility fracture. Therefore early treatment is important. Treatment can be guided by using a tool such as FRAX⁹, or by a DEXA scan to measure bone mineral density. Currently Vitamin D replacement is recommended for those thought to have depleted levels. An anti-resorptive treatment such as a bisphosphonate can reduce the relative risk of a further fracture by up to 50%. The management of osteoporosis in very frail and older persons requires individualised assessment, ensuring the risks of any treatment don't outweigh the benefits.

References

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9. University of Sheffield. (n.d.). *FRAX tool*. Retrieved from <https://www.sheffield.ac.uk/FRAX/>
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On the horizon

Body mounted sensors containing gyroscopes and accelerometers can detect sudden falls. Once activated, they can automatically alert for help¹⁰.



Enhanced Recovery after Surgery (ERAS) – Colorectal Surgery

Mr Ali R Shekouh



Bowen Hospital
Wakefield Hospital

General Surgery

Mr Ali R Shekouh, Specialist
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New Zealand has one of the highest incidences of colorectal cancer in the world. Hence, colorectal surgery, laparoscopic and open, play a very important part in the strive for curative treatment for this group of patients.

Colorectal surgery recovery can be associated with possible morbidity and long hospital stays. Historically, different institutes and even individual surgeons within the same units have differing protocols for the management of their post-operative surgical patients. These non-standardised practices make the comparisons of patients' morbidity, hospital length of stay, mortality and patient satisfaction studies difficult.

Background

The ERAS^{®1} Society lead by Professor Ken Fearon, UK, and Professor Olle Ljungqvist, Karolinska Institutet, Sweden, consolidated ideas initially put forth by Professor Henrik Kehlet, Denmark, in the 1990's².

Aim

The main ethos of the ERAS pathway is to minimise the physiological stresses of the patient's surgical journey and to encourage the early return of normal body and gut function.

ERAS is a multi-disciplinary approach to the pre, intra and post-operative care of a surgical patient (Figure ①)³. It requires close collaboration between the surgical, anaesthetic and nursing teams (Figure ②)⁴. Strong patient motivation and a good patient – doctor partnership also positively improve the outcome markers of the ERAS approach⁵. The ERAS pathway for patients starts before the hospital admission and continues after the discharge (Figure ③)⁴. It is important to continually evaluate and analyse any ERAS pathway implemented to ensure its long term success.

Figure ① Components of ERAS³

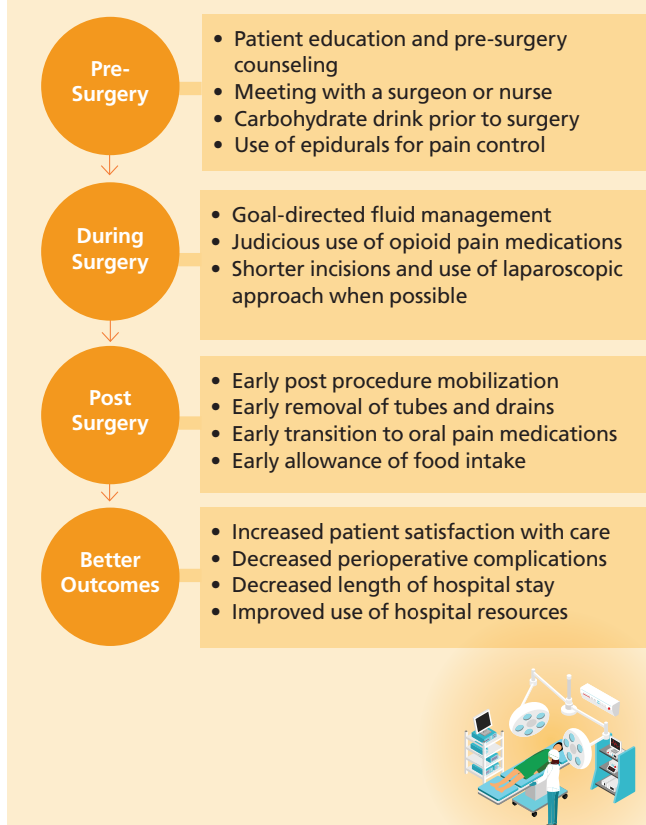
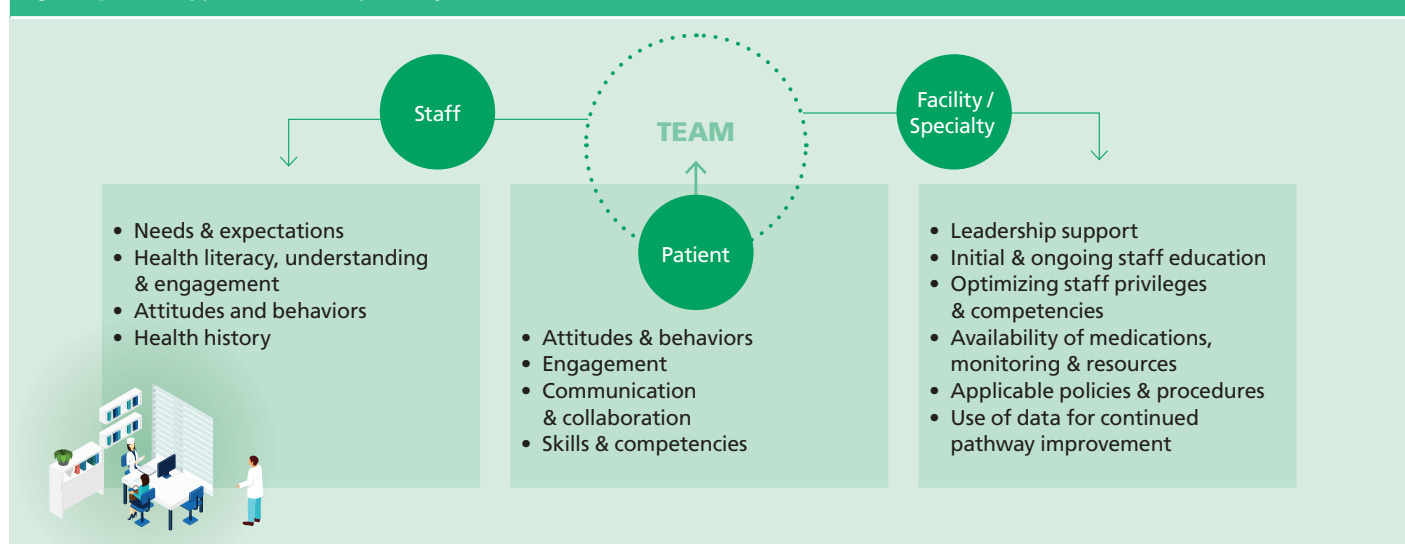


Figure ② Team approach to ERAS pathway⁴



Key elements

A few components (Figure ④)⁷ of the ERAS pathway will be explored briefly as an in-depth discussion of the practice is beyond the scope of this article.

Pre-operative Optimisation

Pre-operative full patient assessment, treatment of co-morbidities, patient education, counselling and conditioning of expectations will physically and psychologically optimise the patient for the operative journey.

Metabolic Stress Response

1. Cytokines and stress hormones are released as the body's stress response to surgery resulting in series of reactions rendering the body in a catabolic state. This can result in tissue breakdown and prolonged recovery.

2. Insulin resistance result from the body stress response to surgery which can cause poor healing capacity. Hence, the ERAS pathway strives to return the body's anabolic state to normal and to minimise hyperglycaemia and protein breakdown after surgery.
3. Preoperative carbohydrate loading enhances insulin sensitivity and decreases insulin resistance – leading to the overall positive effect of returning the body to its normal state post operatively.
4. Mechanical bowel preparation is not routinely used for colorectal patients – as it causes dehydration, electrolyte disturbances and prolonged periods of fasting before surgery.

Anaesthesia

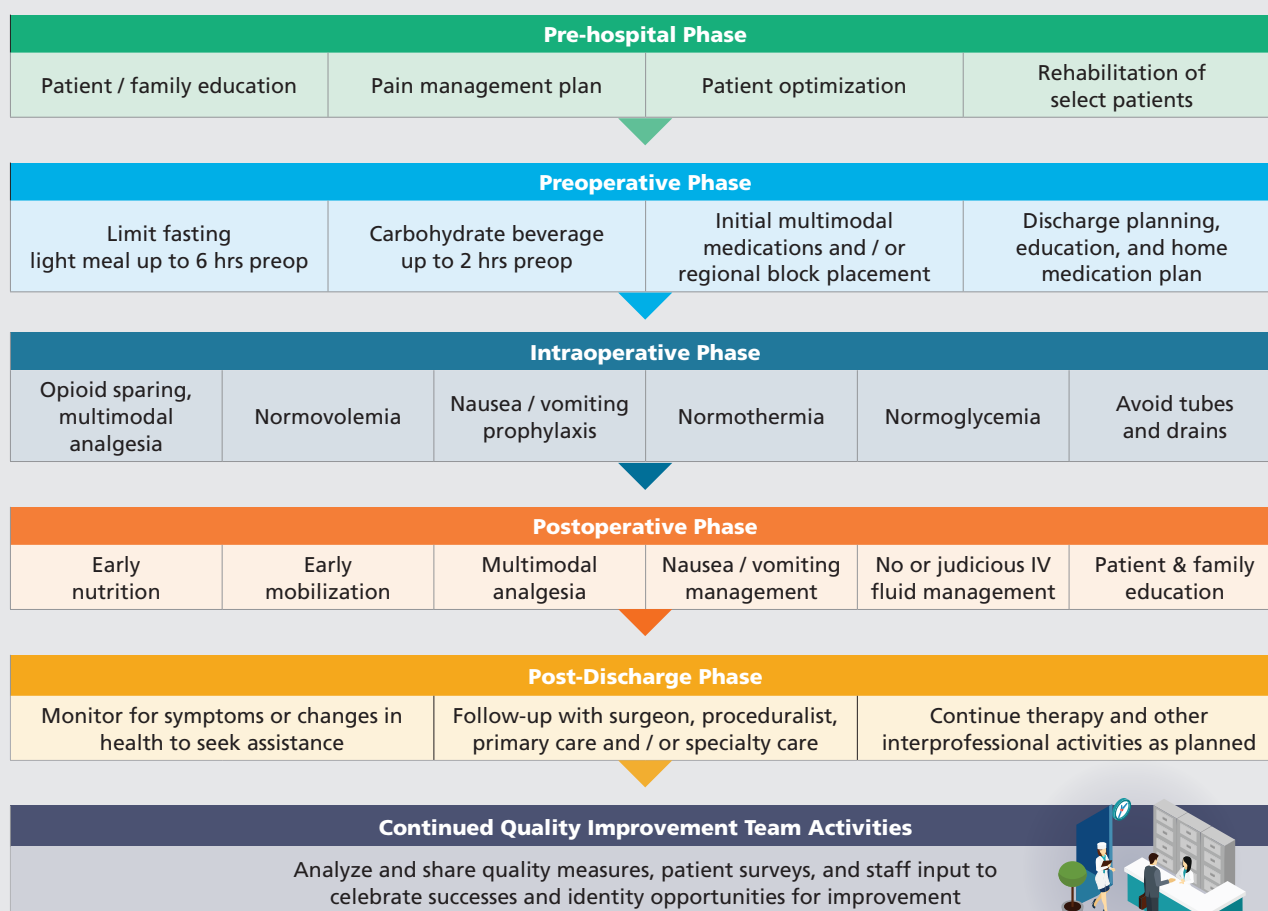
1. Pre-operative fluid balance aim is to maintain tissue perfusion and cellular oxygen delivery, while at the same time keeping the patient in a state of zero fluid balance if possible. There is increasing evidence to suggest that excess salt and water is associated with inhibition of gastrointestinal function, pulmonary complications, immobility and prolonged recovery⁶.
2. Effective analgesia can reduce the body's stress response to surgery and allow early mobilisation. The appropriate utilisation of regional or local anaesthetic nerve blocks would decrease or avoid the amount of oral opioids requirements – paracetamol and non-

steroidal anti-inflammatory drugs are the oral analgesia of choice. Avoiding opioids can expedite the gut function to return to normal.

Early feeding

With the ERAS pathway, the patient is encouraged to start oral intake of clear fluids post operatively as soon as possible. Low residue food intake can be commenced later the same day or by the next day. This would encourage early gut recovery and return of normal function. However, should ileus occur, then the traditional nil by mouth, adequate intravenous hydration and nasogastric aspiration approach is adopted until resolution. Total parental nutrition may need to be started if the ileus is prolonged to avoid malnutrition and the patient entering into a catabolic state.

Figure ③ Pre, Intra and Post Hospital Phases of the ERAS pathway⁴



Summary

The implementation of the ERAS pathway in any unit requires dedicated, coordinated interdisciplinary efforts and financial investments from the institutions – a symbiotic partnership. ERAS has been proven to lead to “improved patient satisfaction and

substantial reduction in length of stay, complication rates, and costs for patients undergoing both open and laparoscopic colorectal surgery”⁷ and is a pathway that should be introduced and undertaken by clinicians performing colorectal surgery.

“ERAS... is a pathway that should be introduced and undertaken by clinicians performing colorectal surgery.”

Figure 4 Detailed Components and Rationale of ERAS⁷

Enhanced recovery	Rationale
1 Preoperative education and stoma training	Patient education, outlining the program and components and expectations for discharge
2 Carbohydrate loading preoperatively and avoidance of prolonged starving	Avoidance of insulin resistance
3 Use of preoperative probiotics	Induce favorable gut flora
4 No mechanical bowel preparation	Avoidance of dehydration and fluid shifts
5 No pre-medication	Minimise effects of anesthesia
6 Goal-directed perioperative fluid administration	Avoidance of fluid overload
7 High perioperative O ₂ concentrations	Maximise O ₂ delivery to tissues
8 Maintenance of normothermia	Avoid deleterious effects of hypothermia on body physiology
9 Epidural analgesia	Excellent pain control and minimise affects of surgery on respiratory function
10 Laparoscopic surgery or transverse incisions	Less postoperative pain and tissue trauma
11 Avoidance of nasogastric tubes	Promote gut function
12 Avoidance of drains	Avoid effects on mobilisation and less pain
13 Avoidance of opioid analgesia	Avoidance of postoperative ileus
14 Use of postoperative laxatives	Encourage bowel function
15 Early removal of bladder catheter	Encourage mobilisation, allow early discharge
16 Enforced early mobilisation	Favourable effects on respiratory function
17 Enforced early postoperative oral feeding	Beneficial effects on gut recovery and function



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Carotid Artery Disease (CAD)

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Carotid stenosis provokes anxiety in both patients and their primary care physicians, and with good reason. Moderate and severe (50-99%) carotid stenosis is an important public health issue. This condition affects around 10% of the general population by their eighth decade and causes up to one third of all strokes¹.

Management of symptomatic carotid disease has focused on early surgical intervention with carotid endarterectomy and this is widely accepted as the gold standard treatment. In contrast, the management of patients with asymptomatic carotid disease remains controversial.

Symptomatic carotid artery disease

Symptomatic carotid disease is defined as focal neurologic symptoms that are sudden in onset and referable to the appropriate carotid artery distribution (ipsilateral to significant carotid atherosclerotic pathology). This can include transient ischemic attacks characterised by focal neurologic dysfunction; transient monocular blindness, referred to as amaurosis fugax or ischaemic stroke¹. The definition is contingent on the occurrence of carotid symptoms within the previous six months^{1,2}.

Carotid endarterectomy

Randomised controlled trials (RCTs) have established carotid endarterectomy (CEA) as safe and effective for reducing the risk of ischaemic stroke in patients with symptomatic carotid artery disease^{3,4,5}.

A pooled analysis of two of these three large RCTs found that CEA within two weeks of a nondisabling stroke or TIA significantly improved outcomes compared with later surgery⁶, with a 30% reduction in absolute risk of stroke. There was sustained but reducing benefit to surgery out to 12 weeks of their last event with 8.9% reduction in stroke.

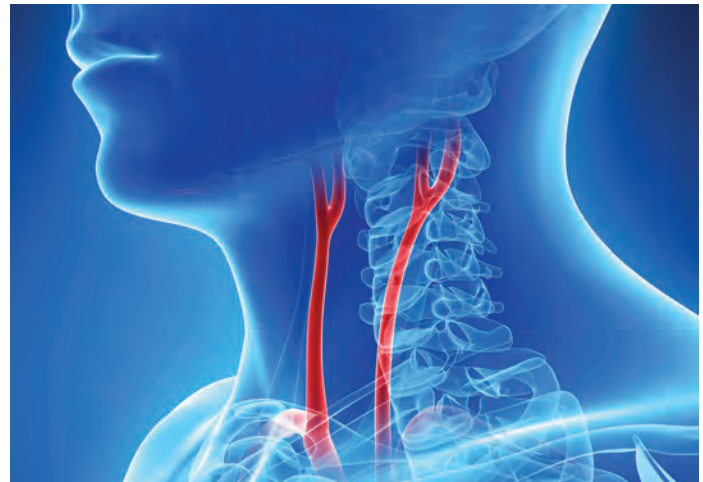
CEA is recommended for patients with recently symptomatic carotid stenosis of 60 to 99% and a life expectancy of at least five years who meet all of the following conditions:

- A surgically accessible carotid lesion
- Absence of clinically significant cardiac, pulmonary, or other disease that would greatly increase the risk of anaesthesia and surgery
- No prior ipsilateral endarterectomy

Carotid artery stenting (CAS) is reserved for patients with surgically inaccessible lesions or those with "hostile neck" features such as previous radiation therapy or neck dissection at the site of disease.

Asymptomatic carotid disease

The most feared outcome of carotid atherosclerosis is ischemic stroke. The estimated risk of ipsilateral stroke in patients with asymptomatic carotid



atherosclerosis (stenosis $\geq 50\%$) is approximately 0.5 to 1.0% annually^{6,7}. Treatment of hypertension and diabetes, as well as lifestyle modification is indicated for patients with asymptomatic carotid atherosclerosis.

Key Points

- Stroke rates in patients with asymptomatic carotid stenosis are declining, attributed to improvements in modern best medical therapy. This will be tested in ongoing RCTs
- The definition of asymptomatic carotid disease is absence of TIA or stroke in the past 6 months
- Carotid endarterectomy is associated with a lower overall risk of stroke or death compared with carotid artery stenting
- At present, the available evidence does not support carotid endarterectomy or stenting for the prevention/reversal of cognitive decline in patients with asymptomatic carotid disease
- Diagnosis is made with ultrasound.

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Integrated Pathway Based Approach to Injury Rehabilitation

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The management of injury related conditions in New Zealand has until recently been largely fragmented.

The management of injury related conditions in New Zealand has until recently been largely fragmented. This is largely due to the nature of the injury rehabilitation sector and the structure of ACC Contracts for service delivery, which has led to an industry made up of smaller rehabilitation organisations specialising in a single component of injury rehabilitation services.

of separate care plans, and overlapping but uncoordinated services that often detract from both patient experience and patient outcomes.

An integrated pathways based approach to injury rehabilitation aims to streamline care by defining in advance the optimal sequence of events from the time of injury through to the time of a service outcome^{1,3,5}.



providers. The approach is reliant on an emphasis towards continuity of care, oversight of the patient care plan (and progress against this) by a single key worker, and coordination of an interdisciplinary team

to ensure seamless and consistent service delivery, that meets the patient needs at the right time^{1,5}. Information technology is further improving the efficacy of this approach by enabling better communication between different clinicians involved in the client care².

There has been a level of consolidation amongst Private Rehabilitation Sector in New Zealand, allowing rehabilitation organisations to grow their capability and capacity to provide an integrated approach and address patient needs throughout their journey to recovery. More and more rehabilitation organisations can provide an integrated model of care across the spectrum of client needs. The growth is enabling investment in infrastructure that further supports this approach, and as patient numbers increase a data

led approach can be employed to further improve clinical efficacy, patient outcomes and service efficiencies.

While the rehabilitation sector continues to improve patient care through an integrated pathways approach, there is opportunity to further improve patient experience, outcomes and service efficiency through vertical integration mechanisms. Vertical integration involves promotion of continuity and coordination of care for clients engaging in rehabilitation programmes with Primary and Secondary Care providers. Over time we see a drive towards improved communication and patient coordination between these three sectors. This will likely be driven through a combination of integrated information technology solutions and an improved understanding of evidence based pathways in the managing clients with injury related incapacity.

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“...More and more rehabilitation organisations can provide an integrated model of care across the spectrum of client needs..”

Patients suffering a serious musculoskeletal injury, or moderate to serious brain injury may access services delivered by up to seven different service providers, all providing slightly different services to meet the range of needs of the patient. This process is often not well coordinated, and patients find themselves repeating assessments, development

This approach requires a single care plan to be put in place with the client, anticipating the type and timing of specific rehabilitation needs which are provided by an interdisciplinary team of health professionals. This approach has been shown to significantly improve patient experience, service outcomes, cost effectiveness and role satisfaction for health care

Supporting Children and their Families Prepare for Surgery

Article written
by Jessica Oliver



📍 Royston Hospital

👤 Denise Primrose, General Manager

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Preparing a child for surgery can be an overwhelming and challenging task for parents. Identifying an opportunity to improve young patient's surgical experiences, Royston Nurse Karla Arrieta started My Royston Journey – a book that assists healthcare professionals and parents communicate to a child what to expect with their upcoming surgery.

A project that started two years ago, Karla was inspired by a speaker at an Anaesthetic Technicians Conference. "The speaker was talking about how she prepared kids before surgery by going into the wards and kids rooms with this big flip chart," Karla recalls. "I thought this would be a good initiative for our hospital that can help prepare kids before surgery in a positive way."

With full support from her team leader, Karla worked in her spare time on My Royston Journey, a bright, colourful and clear book that details what children will experience before surgery, including a space for children to write or draw how they are feeling.

The book went through a thorough review from staff, medical specialists, parents, and a children's group. "The parents feedback has been really positive, as a lot of parents have said they don't know what to say or how to

explain what was going to happen to their child when it came to surgery, so this book is a useful tool to prepare the kids and the parents on what to expect," says Karla.

My Royston Journey officially launched in July alongside the donation of 100 teddy bears for children from the Surgical Trust's Bear Project. Staff can explain medical procedures from the My Royston Journey book to their young patients by showing on the teddy bear, and children can have their new furry friend join them as they are wheeled into theatre.

The books will be available within different facilities and services at Royston for staff to give to parents and children. "The book enables the staff to talk through the surgery process earlier than on the day with the child," says Karla.

"The feedback from parents having this available has been really positive so far too. It's really pleasing to provide this tool to help staff and families prepare a child for surgery."

"The book enables the staff to talk through the surgery process earlier than on the day with the child..."

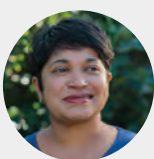
The My Royston Journey project has been submitted into the preliminary hospital round for the 2018 Annual Evolution Quality Awards, and if judged as the winner for Royston will go into the finals against six other entries of the Acurity hospitals and Evolution joint ventures.



Image credit: Laura Wiltshire, Hawke's Bay Today

New Consultants

Acurity Health welcomes the following consultants to our Bowen and Royston hospitals. Please contact them directly if you would like more information about their specialties.



Dr Nichola Naidoo

MBChB, FRANZCR

Radiation Oncologist

P: (04) 896 0200
F: (04) 896 0201
E: referrals.bowen@oncnz.team

Dr Nichola Naidoo has completed specialist training in Australia and New Zealand, and her Clinical Fellowship in Canada. In 2011 Nichola moved to Wellington to take up a position as a specialist consultant in Radiation Oncology. She is a lecturer at the University of Otago Radiation Therapy School and holds a few portfolios within the College of Radiation Oncologists including Director of Training. She also actively participates in clinical trials.

Specialty

Radiation Oncology

Training

- Graduated with MBChB
- FRANZCR
- Clinical Fellowship completed in Canada.

Special interests

Sub-specialty sites are CNS, prostate, skin, sarcoma, GU, and thyroid. Nichola has a special interest in brachytherapy for prostate and skin cancer, and stereotactic radiation treatment for brain metastases.



Dr Anna Nicholson

MBChB, FRANZCR

Radiation Oncologist

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Dr Anna Nicholson completed her specialist training in 2007 at Wellington Blood and Cancer Centre where she works as a Consultant Radiation Oncologist. Anna is the co-director of Training for Radiation Oncology at Wellington Hospital, and is a Clinical Senior Lecturer at the University of Otago. She actively participates in clinical trials through the Breast Cancer Trials Group, and the Trans Tasman Radiation Oncology Group.

Specialty

Radiation Oncology

Training

- Graduated with MBChB from Otago Medical School in 1996
- FRANZCR training in Radiation Oncology completed at Wellington Blood and Cancer Centre in 2007.

Special interests

The care of patients with haematological, gastrointestinal, and breast cancers.



Mr James Blackett

MBChB

General Orthopaedic Surgeon

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F: (06) 876 0168
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Mr James Blackett is a General Orthopaedic Surgeon who specialises in arthroscopy, hip, spine, knee, wrist and hand, and joint replacements. James completed his Medical degree through the Otago University, with further orthopaedic training throughout different locations of New Zealand. He completed his fellowship training specialising in spine at the Western University, London, Ontario. We welcome James to Royston Hospital.

Specialty

Orthopaedics

Training

- MBChB completed at Otago University 2006
- Orthopaedic training in Hawke's Bay, Christchurch, Invercargill, Whangarei, and Wellington
- Fellowship training in spine at the Western University, London, Ontario.

Special interests

Hip and knee replacements, general orthopaedics, spine.



Mr Bevan Jenkins

MBChB, FRACS, BHB

Consultant General Surgeon

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Originally from Auckland, Bevan has settled permanently as a Consultant General Surgeon in the Hawke's Bay since early 2017.

Specialty

General Surgery

Training

- Graduated from University of Auckland with BHB in 2003
- Graduated with MBChB in 2006
- Surgical training completed with admission as a Fellow of the Royal Australasian College of Surgeons in 2015
- Accreditation as a Certified Endoscopist acquired in 2015 for both Gastroscopy and Colonoscopy by the New Zealand Conjoint Committee
- Post-fellowship training completed in 2016 at the Royal Darwin Hospital in Rural and Trauma Surgery.

Special interests

General, colorectal and laparoscopic surgery.



Your Comments from the Previous Connect GP Conference

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🌐 GP Conference

👤 Sarah Malone,
Business Development Manager

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🌐 www.acurity.co.nz

"Excellent topics and speakers"

"Usual high standard – thank you"

"I'll be back again next year"



"This conference gets better every year"

"Superb"

"Thank you for a great conference, I will definitely come again next year"

"Fantastic conference, really enjoyed it all"

"Best conference I've been to"



"The presenters were consistently very good"



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"Great conference, really enjoyed it all"

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